

ABSTRACT OF THE DISCLOSURE

A radiation image read-out apparatus includes a stimulating light projecting system which projects a line stimulating light beam onto a stimulable phosphor sheet, a line sensor consisting of a plurality of photoelectric convertor elements which detect stimulated emission emitted from the portion exposed to the line stimulating beam and are arranged in a row, a condenser lens which is disposed along the line sensor to collect the stimulated emission on the light receiving face of the line sensor and a sub-scanning mechanism which moves one of the line sensor and the stimulable phosphor sheet relatively to each other in a sub-scanning direction. The condenser lens has a chromatic aberration of magnification in the sub-scanning direction such that most of the stimulated emission is collected on the light receiving and most of the stimulating light is collected outside the light receiving face.